AF/1725

COMBINED TRANSMITTAL OF APPEAL BRIEF TO THE BOARD OF PATENT APPEALS AND INTERFERENCES & PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. 1.136(a) (Large Entity)	Docket No. 2170.00019

In Re Application Of: **Robert M. Clement et al.**

Serial No.	Filing Date	Examiner	Group Art Unit
09/346,375	July 1, 1999	M. Elve	1725

Invention: **RELEASING OF GLAZING PANELS**

TO THE ASSISTANT COMMISSIONER FOR PATENTS:

This is a combined Transmittal of Appeal Brief to the Board of Patent Appeals and Interferences and petition under the provisions of 37 CFR 1.136(a) to extend the period for filing an Appeal Brief.

Applicant(s) hereby request(s) an extension of time of (check desired time period):

☐ One month ☐ Two months ☒ Three months ☐ Four months ☐ Five months

from: **December 11, 2001** (*Date*) until: **March 11, 2002** (*Date*)

The fee for the Appeal Brief and Extension of Time has been calculated as shown below:

Fee for Appeal Brief:	$320.00
Fee for Extension of Time:	$920.00
TOTAL FEE FOR APPEAL BRIEF AND EXTENSION OF TIME:	**$1,240.00**

The fee for the Appeal Brief and extension of time is to be paid as follows:

☒ A check in the amount of **$1,240.00** for the Appeal Brief and extension of time is enclosed.

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- ☒ Any additional filing fees required under 37 C.F.R. 1.16.
- ☒ Any patent application processing fees under 37 CFR 1.17.

☒ If an additional extension of time is required, please consider this a petition therefor and charge any additional fees which may be required to Deposit Account No. **02-2712** A duplicate copy of this sheet is enclosed.

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COMBINED TRANSMITTAL OF APPEAL BRIEF TO THE BOARD OF PATENT APPEALS AND INTERFERENCES & PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. 1.136(a) (Large Entity)	Docket No. 2170.00019

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09/346,375	July 1, 1999	M. Elve	1725

Invention: **RELEASING OF GLAZING PANELS**

TO THE ASSISTANT COMMISSIONER FOR PATENTS:

This combined Transmittal of Appeal Brief to the Board of Patent Appeals and Interferences and petition for extension of time under 37 CFR 1.136(a) is respectfully submitted by the undersigned:

Signature

Dated: March 9, 2002

Daniel H. Bliss (Reg. No. 32,398)
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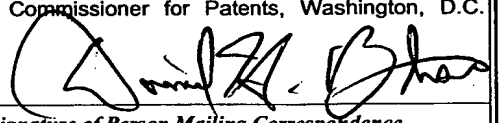

Signature of Person Mailing Correspondence

Daniel H. Bliss

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cc:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE #13 3/28/02 JJ

Art Unit:	1725
Examiner:	M. Elve
Applicant(s):	Robert M. Clement et al.
Serial No.:	09/346,375
Filing Date:	July 1, 1999
For:	RELEASING OF GLAZING PANELS

APPEAL BRIEF

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

By Notice of Appeal filed October 11, 2001, Applicants have appealed the Final Rejection dated April 11, 2001 and submit this brief in support of that appeal.

REAL PARTY IN INTEREST

The real party in interest is the assignee, Carglass Luxembourg Sarl – Zug Branch, which received an Assignment from the inventors, Clement et al.

RELATED APPEALS AND INTERFERENCES

There is a related appeal regarding the present application, which is U.S. Serial No. 09/184,186, filed November 2, 1998.

CERTIFICATE OF MAILING: (37 C.F.R. 1.8) I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Posta l Service with sufficient postage as First Class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on March 9, 2002, by Daniel H. Bliss.

STATUS OF CLAIMS

Claims 1 through 48 have been rejected.

Claims 1 through 48 are being appealed.

STATUS OF AMENDMENTS

The present application claims the benefit under 35 U.S.C. § 120 of U.S. patent application Serial No. 09/184,186. A first Office Action was issued on July 5, 2000. The Examiner rejected claims 1 through 10, 13 through 18, 21 through 25, 30 through 34, and 38 through 41 under 35 U.S.C. § 101 and claims 1 through 44 under 35 U.S.C. § 102(a). A Response was filed on January 4, 2001, amending claims 1, 17, 19, 20, 21, 23, and 37, adding new claims 45 through 48, and arguing the patentability of claims 1 through 48. The Response was acted upon by the Examiner and a second Office Action made Final was issued on April 11, 2001, rejecting claims 1 through 10, 13 through 18, 21 through 25, 30 through 34, 38 through 41, 45, and 46 under 35 U.S.C. § 101, claims 1 through 46 under 35 U.S.C. § 102(a), and claims 47 and 48 under 35 U.S.C. § 103. An Amendment under 37 C.F.R. 1.116 was filed on September 10, 2001, arguing the patentability of claims 1 through 48. To date, no Advisory Action has been received by Counsel for Applicants and Counsel for Applicants is unable to determine whether the Examiner has entered the Amendment under 37 C.F.R. 1.116. A Notice of Appeal was filed on October 11, 2001, appealing the rejection of claims 1 through 48.

SUMMARY OF THE INVENTION

Applicants' invention relates to a method and apparatus for releasing a vehicular glazing panel (windscreen 16) from a supporting frame 7 to which it is bonded by an interposed,

dark colored polyurethane bonding bead 8 which extends around the entire periphery of the panel 16 in contact with frame 7. The windscreen panel 16 comprises an outer glass layer 9, an inner glass layer 10 and intermediately therebetween, an interlayer 11 comprising a tinted sheet material, which is transparent to certain wavelengths of visible light but opaque to others and also to ultra violet (U.V.) radiation. Immediately adjacent the bonding bead 8, the periphery of the inner layer 10 of the windscreen panel 16 is provided with a bonded glass frit layer 12 which is typically dark in color (more typically black in color).

The use of pulsed light operation enables a burst of energy to be delivered to the frit layer 12/bonding bead 8 interface in sufficiently short time to ensure enough energy for release is absorbed at the bonding bead 8/frit layer 12 interface without detrimental heat build up in the body of the glazing panel 16. Sufficient energy for localized release of the glazing panel may be delivered in a single pulse burst; alternatively repeated successive pulses/bursts may be preferable, particularly with more darkly tinted glazing panels.

The apparatus 1 comprises a delivery head 4 including an electric gas discharge tube 2 containing a high pressure Noble/inert gas such as Xenon or Krypton. The discharge tube 2 operates to produce an output burst of light of a range of wavelengths in the visible spectrum (approximately in the range 400nm to 700nm). The energy delivered, per pulse is typically in the range 500-1500 Joules however the energy dissipates (attenuates) rapidly with distance from the tube. A housing/casing 3 surrounds the discharge tube and includes shielding sidewalls 5, 6 and a spanning visible light transmissible window 7. A parabolic reflector wall 8 is positioned opposite the window 7 to reflect light from the reverse side of discharge tube 2 to pass through the window 7.

In use, the optical delivery head 4 is positioned and a manually actuatable trigger

is operated to produce a single light pulse, which passes through the screen 6 and is absorbed at the frit layer 12 and/or the bonding bead 8. The frit 12 or bonding bead rapidly heats up and separates from the screen typically either by glass ablation, temperature carbonization of the bead 8, or other thermal mechanisms. Typically, a single shot/pulse is sufficient to effect release over a length of screen approximating to the length of the discharge tube 2 (typically 5-15cm) although multiple shots may be used (for example at lower power to minimize frit damage, or where the screen is darkly tinted). The operator then moves on to an adjacent portion of the screen periphery before instigating a further light pulse. The procedure is repeated about the entire perimeter of the panel to effect complete release.

In the preferred arrangement, the delivery head 4 is connected to a base unit 40 by an umbilical 41. The base unit 40 includes the power supply and control system 29 for operation of the apparatus, including the trigger network 30, pulse forming network 31, capacitor bank 32, inductor 34, and capacitor charging power supply 33. The umbilical 41 includes the electrical cabling to supply electrical power to the components of the illuminating head 4, including the flashlamp discharge tubes 2a, 2b and cooling fans 45, 46.

The head includes a pair of flashlamps (electrical gas discharge tubes) 2a, 2b arranged in parallel (but connected electrically in series) extending between end connectors 47, 48 and passing through apertures 47, 49 in housing 3. The internal walls of housing 3 are coated in a reflective heat resistant material (typically including a silver material) and define a curved reflector surface arranged to reflect the light from flashlamps 2a, 2b downwardly through the open end 48 of housing 3. The housing 3 is received in a sheath 49 protruding from a lower casing portion 50. The lowermost extent of protruding sheath 49 is fitted with a quartz window 54 secured by an apertured fitment plate 55. The window 54 permits the illuminating light

generated by flashlamps 2a, 2b to pass out of housing 3. The underside of fitment plate 55 is fitted with a "snap fit" removable apertured plate 56, which includes a projecting longitudinal peripheral lip 57. Lip 57 serves as an edge guide, locating against the peripheral edge of the glazing panel and aiding in positioning the head in the correct position with respect to the bonding bead 8. The upper portion of housing 3 is secured to a casing 51 which at opposed ends seats cooling fans 45, 46 in respective angled ducts 52, 53 to direct cooling air to cool the flashlamp tubes 2a, 2b.

A casting 58 is secured to the casting 53, extending upwardly therefrom. Casting 58 includes a hollow boss 59 to which the umbilical 41 is secured and includes an upper elongate edge 60. A shell molded cap 61 is pivotally secured at one end (pivot mounting 62) to the upwardly extending casting 58. When downward manual pressure is applied to the cap 61, slight pivotal 'closing' movement of the cap relative to the casting 58 (against a biasing spring) occurs resulting in engagement of an internal formation provided on cap 61 with a limit switch 63 carried by the casting 58. As a result, the limit switch 63 closes. The control system 29 is configured to inhibit firing of a flashlamp pulse unless the limit switch 63 is closed. In this way, the limit switch 63 and pivotal cap 61 arrangement sets as a safety interlock preventing firing of the flashlamp unless predetermined condition are satisfied (in this case unless sufficient pressure is applied to the cap 61). Even with the interlock overridden, an external switch 66 on the cap 61 must be actuated before the control system 29 initiates the flashlamp firing sequence. The interlock arrangement therefore requires at least two input signals to be passed to the control system 29 before a flashlamp pulse can be triggered.

It has been found that significantly improved results are achieved where the light delivered is in the visible range of the spectrum, and the light is pulsed according to a regime in

which a series of discrete pulses of light are transmitted, the pulse duration (T on) being substantially in the range 1μs to 100ms (more preferably in the range 1ms –2ms) and the pulse repetition frequency being substantially in the range 0.1Hz – 10Hz (more preferably in the range 0.3Hz – 1Hz).

The tubes 2a, 2b are controlled to produce high intensity pulses according to a predetermined pulse regime by means of control unit 29 operating to appropriate programmed instructions in conjunction with the manual trigger. Control unit 29, controls the operation of a trigger network 30 to activate a pulse forming network 31 to supply current to the tubes 2a, 2b (in accordance with the 'interlock' arrangement mentioned above) to product a light pulse having the desired characteristics.

A further feature of the apparatus is that a so called "simmer circuit" is used to supply a substantially continuous leakage/trickle current to the flashlamps 2a or 2b when the apparatus is on or in "standby" mode. This prevents capacitor overcharge and prolongs flashlamp life.

The pulse forming network 31 includes a capacitor bank 32 charged to a preset voltage by a power supply 33. The capacitor bank 32 remains charged until a trigger pulse from the trigger network initiates discharge in the discharge tube 2, when charge stored in capacitor bank 32 discharges through inductor 34 and a secondary trigger transformer 35, to the tube 2. The time constant of the discharge (and hence the light pulse duration and "profile") is determined by the values of the inductor 34 and capacitor bank 32. For an operational system a pulse duration of 1ms – 2ms has been found to be suitable. For present purposes, pulse duration should be understood to be the time interval between the light power reaching half its maximum value and subsequently falling to half its maximum value. The capacitor bank 12 and inductor

34 can therefore be reset to appropriate values depending upon the glazing panel to be released in order to modify the "profile" and power of the pulse delivered. Manually or automatically selectable controls 70 on the base unit 40 permit the output energy and/or pulse duration of the flash tubes 2a, 2b to be modified according to the tint of the object glazing panel. The apparatus may be provided with preset settings selectable by the operator (or automatically) appropriate to common glazing tints or other known variables.

The pulse repetition frequency (corresponding to the length of the inter-pulse interval (T off)) is important to ensure that the period between successive pulses is sufficient to allow the heat absorbed in the thickness of the screen to dissipate before more energy is delivered. The control unit 29 acts to override the manual trigger to inhibit the trigger network 30 from initiating discharge until the required time period has elapsed. The minimum interval between firing typically controlled to be in the ranges 0.3Hz – 1Hz. A maximum interval between firing is also set by the control system, typically in the range 10 – 20 seconds or above. If the operator does not fire the flash tubes until after the maximum interval has passed from the preceding firing, the control system automatically discharges the capacitor arrangement to ground and switches the power supply to a standby mode; thereafter the power supply on the base unit 40 must be set to an 'active' mode before the apparatus will operate.

In one embodiment, the delivery head 4 may be carried by a motorized tracking system (not shown) arranged to track the head 4 about the entire periphery of glazing panel 6 to effect complete release of the panel 6 from frame 7. The operation of the tracking system 4 and light energy delivery by head 4 are co-coordinated (by control means) such that the speed of tracking about the frame is maintained at a predetermined rate.

ISSUES

One issue in this Appeal is statutorily formulated in 35 U.S.C. § 101. Specifically, the issue is whether the claimed invention of claims 1 through 10, 13 through 18, 21 through 25, 30 through 34, and 38 through 41 are claiming the same invention as that of claims 1 through 7 and 10 through 32 of copending Application No. 09/184,186 under 35 U.S.C. § 101. Another issue in this Appeal is statutorily formulated in 35 U.S.C. § 102(a). Specifically, the issue is whether the claimed invention of claims 1 through 46 is disclosed and anticipated under 35 U.S.C. § 102(a) as being anticipated by WO(I) (96/17737). A further issue in this Appeal is statutorily formulated in 35 U.S.C. § 103. Specifically, the issue is whether the claimed invention of claims 47 and 48 are obvious and unpatentable under 35 U.S.C. § 103 over WO(I)(96/17737) in view of Soltz et al. (U.S. Patent No. 5,272,716).

GROUPINGS OF CLAIMS

Claims 1 through 10 and 13 through 18 stand or fall together in regard to the rejection under 35 U.S.C. § 101.

Claims 21 through 25, 30 through 34, and 38 through 41 stand or fall together in regard to the rejection under 35 U.S.C. § 101.

Claims 1 through 4, 15, 21, 22, 25, 40, and 41 stand or fall together in regard to the rejection under 35 U.S.C. § 102(a).

Claims 5 through 14 and 16 through 20 stand or fall together in regard to the rejection under 35 U.S.C. § 102(a).

Claims 23, 24, 26 through 39, and 42 through 44 stand or fall together in regard to the rejection under 35 U.S.C. § 102(a).

Claim 45 stands or falls together in regard to the rejection under 35 U.S.C. § 102(a).

Claim 46 stands or falls together in regard to the rejection under 35 U.S.C. § 102(a).

Claim 47 stands or falls together in regard to the rejection under 35 U.S.C. § 103.

Claim 48 stands or falls together in regard to the rejection under 35 U.S.C. § 103.

ARGUMENT

35 U.S.C. § 101

As to patentability, 35 U.S.C. § 101 provides that:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The test for the same invention is whether the claims being compared could be literally infringed by each other. The court noted that "[a] good test, and probably the only objective test, for 'same invention,' is whether one of the claims could be literally infringed without literally infringing the other. If it could be, the claims do not define identically the same invention." In re Vogel, 422 F.2d 438, 164 U.S.P.Q. 619 (C.C.P.A.).

In the present application, claim 1 claims a method of releasing a glazing panel from a frame to which the panel is bonded by interposed bonding material. The method includes arranging light energy delivery means adjacent the glazing panel and operating the light energy delivery means to transmit light energy through the glazing panel to effect

thermal release of the glazing panel from the frame.

Claim 1 of copending Application No. 09/184,186 claims a method of releasing a glazing panel from a frame to which the panel is bonded by interposed bonding material. The method includes arranging light energy delivery means adjacent the glazing panel and operating the light energy delivery means to transmit light energy through the screen to effect release of the panel from the frame.

Claim 1 of the present application claims that the light energy delivered effects thermal release of the panel from the frame. This limitation is not claimed in claim 1 of copending Application No. 09/184,186. Claim 1 of the present application would be literally infringed by thermal release of the panel from the frame as would claim 1 of copending Application No. 09/184,186. Claim 1 of the present application would not be literally infringed by a non-thermal release mechanism. However, claim 1 of copending Application No. 09/184,186 would be literally infringed by a non-thermal release mechanism. As such, claim 1 of the present application would not be literally infringed by claim 1 of copending Application No. 09/184,186 because it lacks effecting thermal release of the panel from the frame. Based on In re Vogel, the claims of the present application could be literally infringed without literally infringing the claims of copending Application No. 09/184,186 and, therefore, the claims do not define identically the same invention. Therefore, it is respectfully submitted that claims 1 through 10 and 13 through 18 are allowable over the provisional rejection under 35 U.S.C. § 101.

In the present application, claim 21 claims an apparatus for releasing a glazing panel from a frame to which the panel is bonded by interposed bonding material. The apparatus includes light energy delivering means arrangeable adjacent the glazing panel, and operable to

transmit light energy through the glazing panel to effect thermal release of the panel from the frame.

Claim 19 of copending Application No. 09/184,186 claims an apparatus for releasing a glazing panel from a frame to which the panel is bonded by interposed bonding material. The apparatus comprising light energy delivery means arrangeable adjacent the glazing panel, and operable to transmit light energy through the screen to effect release of the panel from the frame.

Claim 21 of the present application claims that the light energy delivered effects thermal release of the panel from the frame. This limitation is not claimed in claim 19 of copending Application No. 09/184,186. Claim 21 of the present application would be literally infringed by thermal release of the panel from the frame as would claim 19 of copending Application No. 09/184,186. Claim 21 of the present application would not be literally infringed by a non-thermal release mechanism. However, claim 19 of copending Application No. 09/184,186 would be literally infringed by a non-thermal release mechanism. As such, claim 19 of copending Application No. 09/184,186 would not literally infringe claim 21 of the present application because it lacks effecting thermal release of the panel from the frame. Based on In re Vogel, the claims of the present application could be literally infringed without literally infringing the claims of copending Application No. 09/184,186 and, therefore, the claims do not define identically the same invention. Therefore, it is respectfully submitted that claims 21 through 25, 30 through 34, and 38 through 41 are allowable over the provisional rejection under 35 U.S.C. § 101.

35 U.S.C. § 102

As to patentability, 35 U.S.C. § 102(a) provides that a person shall be entitled to a patent unless:

> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent.

A rejection grounded on anticipation under 35 U.S.C. § 102 is proper only where the subject matter claimed is identically disclosed or described in a reference. In other words, anticipation requires the presence of a single prior art reference which discloses each and every element of the claimed invention arranged as in the claim. In re Arkley, 455 F.2d 586, 172 U.S.P.Q. 524 (C.C.P.A. 1972); Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 U.S.P.Q. 781 (Fed. Cir. 1983); Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 U.S.P.Q. 481 (Fed. Cir. 1984).

However, under 35 U.S.C. § 363, an international application designating the United States shall have the effect, from its international filing date under article 11 of the treaty, of a national application for patent regularly filed in the Patent Office. As such, the international application enjoys the same effect as of its international filing date as a normal domestic application filed in the United States.

35 U.S.C. § 120 provides that an application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States, or as provided by section 363 of this title, which is filed by an inventor or inventors named in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting

or abandonment of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the filing date of the first application and if it contains or is amended to contain a specific reference to the earlier filed application.

A rejection based on 35 U.S.C. § 102(a) can be overcome by:

* * *

(E) Perfecting a claim to priority under 35 U.S.C. § 119(a) – (d);

(F) Perfecting priority under 35 U.S.C. § 119(e) or 120 by amending the specification of the application to contain a specific reference to a prior application in accordance with 37 C.F.R. 1.78. See M.P.E.P. 706.02(b).

WO 96/17737 to Ledger et al. has a priority date of GB 9424659.2 filed on December 7, 1994 and has a PCT Application No. PCT/GB95/02847 with a filing date of December 6, 1995 in which the United States (U.S.) was a designated state. This PCT application was published on June 12, 1996. This PCT application entered the national phase in the U.S. under 35 U.S.C. § 371 as U.S. Serial No. 08/693,060 and was entitled to the filing date of the PCT application under 35 U.S.C. § 363, which was December 5, 1995. A copy of the Official Filing Receipt is attached in Appendix 1.

A continuation application was filed from U.S. Serial No. 08/693,060 and was assigned U.S. Serial No. 09/133,854, filed August 14, 1998. U.S. Serial No. 09/133,854 has the benefit under 35 U.S.C. § 120 because it was filed under 37 C.F.R. 1.53(b) before the abandonment of U.S. Serial No. 08/693,060 on August 28, 1998. A copy of the Official Filing Receipt is attached in Appendix 2.

Another application, U.S. Serial No. 09/184,186, was filed on November 11, 1998 and claims priority under 35 U.S.C. § 119 to United Kingdom Application No. 9817441.0, filed

August 11, 1998. A copy of the Official Filing Receipt is attached in Appendix 3. On April 20, 2000, a Preliminary Amendment and new Declaration and Power of Attorney were filed to claim the benefit of 35 U.S.C. § 120 of both prior U.S. Serial Nos. 09/133,854 and 08/693,060 with U.S. Serial No. 09/133,854 still pending. A copy of the Preliminary Amendment and Declaration and Power of Attorney are attached in Appendix 4.

The present application was filed on July 1, 1999 and claims priority under 35 U.S.C. § 119 to United Kingdom Application No. 9817441.0, filed August 11, 1998 and claims the benefit of 35 U.S.C. § 120 of U.S. Serial No. 09/184,186, filed November 11, 1998. A copy of the Official Filing Receipt is attached in Appendix 5.

The present application originally claimed the benefit of 35 U.S.C. § 120 of prior U.S. Serial No. 09/184,186, which has been subsequently amended to claim the benefit of 35 U.S.C. § 120 of both prior U.S. Serial Nos. 09/133,854 and 08/693,060. Applicants have previously amended the Specification to contain a specific reference to U.S. Serial No. 09/184,186, U.S. Serial No. 09/133,854, and U.S. Serial No. 08/693,060. The present application and U.S. Serial No. 09/184,186, U.S. Serial No. 09/133,854, and U.S. Serial No. 08/693,060 are owned by the same assignee. U.S. Serial No. 08/693,060, based on PCT Application No. PCT/GB95/02847 filed on December 6, 1995 under 35 U.S.C. § 363, claimed priority under 35 U.S.C. § 119 to GB 9424659.2 filed on December 7, 1994.

Based on the above, the present application has a priority date prior to June 12, 1996. Therefore, Applicants in the present application have perfected priority under 35 U.S.C. § 119(a) – (d) to overcome the rejection under 35 U.S.C. § 102(a) based on WO 96/17737.

WO 96/17737 is <u>not</u> prior art to the claimed invention of claims 1 through 4, 15, 21, 22, 25, 40, and 41. As a result, the claims of the present application cannot be anticipated by

WO 96/17737. WO 96/17737 has the same disclosure as copending application Serial No. 09/133,854, which Applicants claim the benefit under 35 U.S.C. § 120 from Serial No. 08/693,060, which is the national stage filing of WO 96/17737. Serial No. 09/184,186 claims the benefit under 35 U.S.C. § 120 of Serial No. 09/133,854. The Specification of the present application was previously amended to contain a specific reference to the earlier filed applications. The present application claims the benefit under 35 U.S.C. § 120 of Serial No. 09/186,184, which claims the benefit under 35 U.S.C. § 120 of Serial No. 09/133,854 and Serial No. 08/693,060, and is entitled to the effective filing date of the common parent application, Serial No. 08/693,060, which is December 5, 1995. This is clearly prior to the international publication date of June 13, 1996. Applicants in the present application have perfected priority under 35 U.S.C. § 120 to overcome the rejection under 35 U.S.C. § 102(a) based on WO 96/17737. Applicants in the present application have perfected priority under 120 to overcome the rejection under 35 U.S.C. § 102(a) based on WO 96/17737. As such, WO 96/17737 cannot be an anticipatory reference and cannot be 102(a) prior art to claims 1 through 4, 15, 21, 22, 25, 40, and 41 of the present application. The rejection is therefore improper and should be withdrawn. Thus, it is respectfully submitted that claims 1 through 4, 15, 21, 22, 25, 40, and 41 are allowable over the rejection under 35 U.S.C. § 102(a).

WO 96/17737 discloses releasing of bonded screens. In order to remove a windscreen 1 from a frame 5, a laser delivery system 9 may be used. The laser delivery system 9 comprises a waveguide 10 directing laser radiation from an energy source to an applicator head 11 which is placed adjacent the peripheral edge of the windscreen 1 to direct laser radiation through the windscreen 1. Applicator head 11 includes a beam guide 12 and a slidable on/off switch. Continuous wave in laser radiation is directed form the applicator head 11 through a

localized portion of the windscreen 1 to impinge upon the bonding bead 6. The laser radiation is in the visible and near infra-red region of the electromagnetic spectrum. Applicator head 11 is guided (either automatically or manually) around the entire periphery of the windscreen 1 with the laser radiation activated to ensure complete separation around the entire periphery.

In contradistinction, claims 5 through 14 and 16 through 20 claim features not found in WO 96/17737. Specifically, claim 5 claims that the light energy attenuates significantly with distance such that a few centimeters from the energy delivery means the light energy density is significantly diminished from its maximum value. Claim 6 claims that at a distance substantially in the range 5cm or less from the delivery means the light energy density is 50% maximum value, or below. Claim 7 claims that the light energy is non-coherent. Claim 8 claims that the light energy delivered is pulsed according to a predetermined regime. Claim 9 claims that the pulse duration (T on) of a light pulse event is substantially in the range 1μs-100ms. Claim 10 claims that the pulse duration of a light pulse event is substantially in the range 1ms-2ms. Claim 11 claims that the pulse regime is controlled to inhibit a following light pulse event if the time elapsing after a preceding light pulse event is less than a predetermined time. Claim 12 claims that the pulse regime is controlled to inhibit a following light pulse event if the time elapsing after a preceding light pulse event is greater than a predetermined time. Claim 13 claims that the pulse duration (T on) is less than minimum permissible inter-pulse interval (T off). Claim 14 claims that a single pulse of light energy delivered is of sufficient energy to effect separation of the screen from the frame along a length of the bonding material. Claim 16 claims that the energy delivery means comprises electrical gas discharge apparatus. Claim 17 claims that the operation of the gas discharge apparatus is controlled to limit either one of the pulse rate or duration of the light pulse. Claim 18 claims that the operation of the gas discharge apparatus

is controlled by charging a capacitor arrangement, initiating a trigger pulse to discharge the capacitor arrangement, and discharging the capacitor arrangement through an inductor to the gas discharge apparatus. Claim 19 claims that the gas discharge light emitting device is fed with a current at times other than during a pulse event. Claim 20 claims that the current is monitored to provide an indication of the operability of the gas discharge light emitting device.

WO 96/17737 does not disclose or anticipate the claimed invention of claims 5 through 14 and 16 through 20. WO 96/17737 merely discloses releasing of bonded screens having a laser delivery system in order to remove a windscreen from a frame in which an applicator head delivers laser radiation is in the visible and near infra-red region of the electromagnetic spectrum. While this reference mentions that the laser radiation is pulsed in claim 8 thereof, WO 96/17737 lacks the specifics of pulsing the laser radiation and the other limitations found in claims 5 through 14 and 16 through 20 of the present application. The Examiner has not specifically pointed out where in the reference these features are found. As a result, WO 96/17737 fails as anticipation of claims 5 through 14 and 16 through 20. Therefore, the rejection is therefore wrong and improper. Thus, it is respectfully submitted that claims 5 through 14 and 16 through 20 are allowable over the rejection under 35 U.S.C. § 102(a).

As to claims 23, 24, 26 through 39, and 42 through 44, these claims also claim features not found in WO 96/17737. Claim 23 claims control means to either one of adjust or limit at least one of the pulse repetition rate of successive light pulse events, the duration of a light pulse event, and the intensity of the light delivered. Claim 24 claims control means for controlling one or more apparatus parameters including the minimum permissible time elapsing between subsequent discharge pulses of the electrical gas discharge apparatus. Claim 26 claims a safety interlock requiring at least two input devices to be actuated before

light energy can be delivered from the delivery means. Claim 27 claims a delivery head from which the light energy is delivered, the delivery head including at least two input devices comprising the safety interlock, both input devices requiring actuation in order to enable light energy to be delivered from the delivery means. Claim 28 claims that the input devices comprise electrical input devices (such as switch means). Claim 29 claims that following actuation the input devices comprising the interlock are reset to a non-actuation state. Claim 30 claims that a controller is provided for selectively adjusting the intensity of the light delivered. Claim 31 claims different preset settings which may be switched to alter one or more parameters of the light energy delivered, dependent upon the tint of the glazing panel to be de-bonded or other factors. Claim 32 claims adjustable light energy parameters include light intensity, pulse duration, and/or pulse interval. Claim 33 claims that the light energy delivery means comprises electrical gas discharge device. Claim 34 claims that the electrical discharge device includes a light emitting discharge tube. Claim 35 claims that the electrical gas discharge apparatus includes a pair of light emitting discharge tubes arranged in side by side relationship. Claim 36 claims cooling means for cooling a light emitting element of the light energy delivery means. Claim 37 claims that the cooling means comprises air cooling means including an electrically operated fan. Claim 38 claims a pulse forming network having a capacitor and inductor arrangement in which the capacitor discharges through the inductor to drive the electrical gas discharge apparatus to produce a light pulse. Claim 39 claims a trigger network for initiating the capacitor of the pulse forming network to discharge. Claim 42 claims that the apparatus comprises an edge guide arranged to locate against a running edge of the glazing panel. Claim 43 claims that the apparatus comprises a light energy delivery head including an electrically operable light emitting element, a base

unit remote from the delivery head, the base unit including electrical power supply for the light emitting element of the delivery head, and a flexible umbilical extending between the base unit and the delivery head permitting connection of the delivery head to the base unit. Claim 44 claims that the light emitting element of the delivery head comprises an electrical gas discharge light emitting device, the base unit including an electrical power arrangement having a capacitor for discharging through the electrical gas discharge light emitting device in the head via the umbilical.

WO 96/17737 does not disclose or anticipate the claimed invention of claims 23, 24, 26 through 39, and 42 through 44. WO 96/17737 merely discloses releasing of bonded screens having a laser delivery system in order to remove a windscreen from a frame in which an applicator head delivers laser radiation is in the visible and near infra-red region of the electromagnetic spectrum. WO 96/17737 lacks the pulse forming network, trigger network, flexible umbilical, and the other limitations found in claims 23, 24, 26 through 39, and 42 through 44 of the present application. Applicants challenge the Examiner to specifically point out where in the reference these features are found. As a result, WO 96/17737 fails as anticipation of claims 23, 24, 26 through 39, and 42 through 44. Therefore, the rejection is wrong and improper. Thus, it is respectfully submitted that claims 23, 24, 26 through 39, and 42 through 44 are allowable over the rejection under 35 U.S.C. § 102(a).

As to claim 45, claim 45 claims a method of releasing a glazing panel from a frame to which the glazing panel is bonded by interposed bonding material. The method includes the steps of directing at least one light output pulse from a flashlamp via an optical delivery head at a wavelength to be absorbed by either one of the bonding material or a frit layer on an inside face of the glazing panel about a periphery thereof and conforming to the frame. The method

also includes the steps of moving the optical delivery head to adjacent portions of the glazing panel along a path of either one of the frit layer or the bonding material. The method further includes the steps of repeating the at least one light pulse to effect release of the glazing panel from the frame.

WO 96/17737 does not disclose or anticipate the claimed invention of claim 45. WO 96/17737 merely discloses releasing of bonded screens having a laser delivery system in order to remove a windscreen from a frame in which an applicator head delivers laser radiation is in the visible and near infra-red region of the electromagnetic spectrum. WO 96/17737 lacks the step of directing at least one light output pulse from a flashlamp via an optical delivery head at a wavelength to be absorbed by either one of the bonding material or a frit layer found in claim 45 of the present application. Applicants challenge the Examiner to specifically point out where in the reference this feature is found. As a result, WO 96/17737 fails as anticipation of claim 45. Therefore, the rejection is wrong and improper. Thus, it is respectfully submitted that claim 45 is allowable over the rejection under 35 U.S.C. § 102(a).

As to claim 46, claim 46 claims a glazing panel releaser for releasing a glazing panel from a frame to which the glazing panel is bonded by interposed bonding material. The glazing panel releaser includes an optical delivery head to direct light at either one of the bonding material or a frit layer on an inside face of the glazing panel about a periphery thereof and conforming to the frame. The glazing panel releaser also includes at least one flashlamp operable to produce the light directed by the optical delivery head in the form of at least one light pulse at a wavelength to be absorbed by either one of the frit layer or the bonding material to effect release of the glazing panel from the frame.

WO 96/17737 does not disclose or anticipate the claimed invention of claim 46.

WO 96/17737 merely discloses releasing of bonded screens having a laser delivery system in order to remove a windscreen from a frame in which an applicator head delivers laser radiation is in the visible and near infra-red region of the electromagnetic spectrum. WO 96/17737 lacks at least one flashlamp operable to produce the light directed by the optical delivery head in the form of at least one light pulse at a wavelength to be absorbed by either one of the frit layer or the bonding material found in claim 46 of the present application. Applicants challenge the Examiner to specifically point out where in the reference this feature is found. As a result, WO 96/17737 fails as anticipation of claim 46. Therefore, the rejection is wrong and improper. Thus, it is respectfully submitted that claim 46 is allowable over the rejection under 35 U.S.C. § 102(a).

35 U.S.C. § 103

As to patentability, 35 U.S.C. § 103 provides that a patent may not be obtained:

> If the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Id.

The United States Supreme Court interpreted the standard for 35 U.S.C. § 103 in Graham v. John Deere, 383 U.S. 1, 148 U.S.P.Q. 459 (1966). In Graham, the Court stated that under 35 U.S.C. § 103:

> The scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or non-obviousness of the subject matter is determined. 148 U.S.P.Q. at 467.

Using the standard set forth in Graham, the scope and content of the prior art relied upon by the Examiner will be determined.

U.S. Patent No. 5,272,716 to Soltz et al. discloses a hand held laser apparatus. The hand held laser apparatus 10 has an external power supply 12 including control circuitry. The hand held laser apparatus 10 includes a semiconductor laser device 14, a guide laser device 16, and a pair of lens 18 for focusing and collimating the output of the laser devices Within the power supply control circuit 12, as shown in FIG. 2, is a power supply 30 switchably connected to the semiconductor laser devices of the hand held laser apparatus 10. The power supply control circuit 12 includes a mode control circuit 32 and a pulsewidth control circuit 34. Soltz et al. does not disclose either at least two input devices to be manually actuated before light energy is delivered by the glazing panel releaser or a control apparatus including different settings which are switchable to alter at least one parameter of the light energy delivered, dependent upon the tint of the glazing panel to be released.

In contradistinction, claim 47 claims a glazing panel releaser for releasing a glazing panel from a frame to which the glazing panel is bonded by interposed bonding material. The glazing panel releaser includes an optical delivery device to direct light through the glazing panel to effect release of the glazing panel from the frame. The glazing panel releaser also includes a safety input apparatus requiring at least two input devices to be manually actuated before light energy is delivered by the glazing panel releaser.

The United States Court of Appeals for the Federal Circuit (CAFC) has stated in determining the propriety of a rejection under 35 U.S.C. § 103, it is well settled that the obviousness of an invention cannot be established by combining the teachings of the prior art absent some teaching, suggestion or incentive supporting the combination. See In re Fine, 837

F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 227 U.S.P.Q. 657 (Fed. Cir. 1985); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 U.S.P.Q. 929 (Fed. Cir. 1984). The law followed by our court of review and the Board of Patent Appeals and Interferences is that " [a] prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." In re Rinehart, 531 F.2d 1048, 1051, 189 U.S.P.Q. 143, 147 (C.C.P.A. 1976). See also In re Lalu, 747 F.2d 703, 705, 223 U.S.P.Q. 1257, 1258 (Fed. Cir. 1984) ("In determining whether a case of prima facie obviousness exists, it is necessary to ascertain whether the prior art teachings would appear to be sufficient to one of ordinary skill in the art to suggest making the claimed substitution or other modification.")

As to the differences between the prior art and the claims at issue, the primary reference to WO 96/17737 does not qualify as prior art under 35 U.S.C. § 102(a) and the combination cannot be made. Soltz et al. '716 merely discloses a hand held laser apparatus having a power supply control circuit including a mode control circuit and a pulsewidth control circuit. Soltz et al. '716 lacks at least two input devices to be manually actuated before light energy is delivered by a glazing panel releaser. Soltz et al. '716 alone, if modifiable or combinable with another reference other than WO 96/17737, fails to teach or suggest the combination of a glazing panel releaser including a safety input apparatus requiring at least two input devices to be manually actuated before light energy is delivered by the glazing panel releaser as claimed by Applicants.

Against this background, it is submitted that the present invention of claim 47 is not obvious in view of the modification of Soltz et al. '716. The reference fails to teach or

suggest the combination of the glazing panel releaser of claim 47. Therefore, it is respectfully submitted that claim 47 is not obvious and is allowable over the rejection under 35 U.S.C. § 103.

As to claim 48, claim 48 claims a glazing panel releaser for releasing a glazing panel from a frame to which the glazing panel is bonded by interposed bonding material. The glazing panel releaser includes an optical delivery device to direct light through the glazing panel to effect release of the glazing panel from the frame. The glazing panel releaser also includes a control apparatus including different settings which are switchable to alter at least one parameter of the light energy delivered, dependent upon the tint of the glazing panel to be released.

As to the differences between the prior art and the claims at issue, the primary reference to WO 96/17737 does not qualify as prior art under 35 U.S.C. § 102(a) and the combination cannot be made. Soltz et al. '716 merely discloses a hand held laser apparatus having a power supply control circuit including a mode control circuit and a pulsewidth control circuit. Soltz et al. '716 lacks a control apparatus including different settings which are switchable to alter at least one parameter of the light energy delivered, dependent upon the tint of a glazing panel to be released. Soltz et al. '716 alone, if modifiable or combinable with another reference other than WO 96/17737, fails to teach or suggest the combination of a glazing panel releaser including a control apparatus including different settings which are switchable to alter at least one parameter of the light energy delivered, dependent upon the tint of the glazing panel to be released as claimed by Applicants.

Against this background, it is submitted that the present invention of claim 48 is not obvious in view of the modification of Soltz et al. '716. The reference fails to teach or suggest the combination of the glazing panel releaser of claim 48. Therefore, it is respectfully submitted that claim 48 is not obvious and is allowable over the rejection under 35 U.S.C. § 103.

Obviousness under § 103 is a legal conclusion based on factual evidence (In re Fine, 837 F.2d 1071, 1073, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988), and the subjective opinion of the Examiner as to what is or is not obvious, without evidence in support thereof, does not suffice. Since the Examiner has not provided a sufficient factual basis, which is supportive of his/her position (see In re Warner, 379 F.2d 1011, 1017, 154 U.S.P.Q. 173, 178 (C.C.P.A. 1967), cert. denied, 389 U.S. 1057 (1968)), the rejection of claims 47 and 48 is improper. Therefore, it is respectfully submitted that claims 47 and 48 are allowable over the rejection under 35 U.S.C. § 103.

In conclusion, it is respectfully submitted that the rejection of claims 1 through 48 is improper and should be reversed.

Respectfully submitted,

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Attorney Docket No.: 2170.00019

APPENDIX

The claims on appeal are as follows:

1. A method of releasing a glazing panel from a frame to which the panel is bonded by interposed bonding material, the method comprising:

i) arranging light energy delivery means adjacent the glazing panel; and,

ii) operating the light energy delivery means to transmit light energy through the glazing panel to effect release of the glazing panel from the frame.

2. A method according to claim 1, wherein the light energy delivered is of a wavelength substantially in the range 300nm-1500nm.

3. A method according to claim 2, wherein the light energy delivered is of a wavelength substantially in the range 400nm-700nm.

4. A method according to claim 1, wherein the light energy delivered comprises a plurality of wavelengths.

5. A method according to claim 1, wherein the light energy attenuates significantly with distance such that a few centimetres from the energy delivery means the light energy density is significantly diminished from its maximum value.

6. A method according to claim 5, wherein at a distance substantially in the range 5cm or less from the delivery means the light energy density is 50% maximum value, or below.

7. A method according to claim 1, wherein the light energy is non-coherent.

8. A method according to claim 1, wherein the light energy delivered is pulsed according to a predetermined regime.

9. A method according to claim 8, wherein the pulse duration (T on) of a light pulse event is substantially in the range 1μs-100ms.

10. A method according to claim 9, wherein the pulse duration of a light pulse event is substantially in the range 1ms-2ms.

11. A method according to claim 1, wherein the pulse regime is controlled to inhibit a following light pulse event if the time elapsing after a preceding light pulse event is less than a predetermined time.

12. A method according to claim 1, wherein the pulse regime is controlled to inhibit a following light pulse event if the time elapsing after a preceding light pulse event is greater than a predetermined time.

13. A method according to claim 1, wherein the pulse duration (T on) is less than minimum permissible inter-pulse interval (T off).

14. A method according to claim 8, wherein a single pulse of light energy delivered is of sufficient energy to effect separation of the screen from the frame along a length of the bonding material.

15. A method according to claim 1, wherein the light energy delivery means is hand held and positionable relative to the glazing manually by an operator.

16. A method according to claim 1, wherein the energy delivery means comprises electrical gas discharge apparatus.

17. A method according to claim 16, wherein operation of the gas discharge apparatus is controlled to limit either one of the pulse rate or duration of the light pulse.

18. A method according to claim 17, wherein the operation of the gas discharge apparatus is controlled by:

i) charging a capacitor arrangement;

ii) initiating a trigger pulse to discharge the capacitor arrangement; and,

iii) discharging the capacitor arrangement through an inductor to the gas

discharge apparatus.

19. A method according to claim 17, wherein the gas discharge light emitting device is fed with a current at times other than during a pulse event.

20. A method according to claim 19, wherein the current is monitored to provide an indication of the operability of the gas discharge light emitting device.

21. Apparatus for releasing a glazing panel from a frame to which the panel is bonded by interposed bonding material, the apparatus comprising light energy delivering means arrangeable adjacent the glazing panel, and operable to transmit light energy through the glazing panel to effect release of the panel from the frame.

22. Apparatus according to claim 21, which is controllable to deliver the light energy in the form of a pulse of light.

23. Apparatus according to claim 21, wherein the apparatus includes control means to either one of adjust or limit at least one of:

the pulse repetition rate of successive light pulse events;

the duration of a light pulse event; and

the intensity of the light delivered.

24. Apparatus according to claim 21 including control means for controlling

one or more apparatus parameters including the minimum permissible time elapsing between subsequent discharge pulses of the electrical gas discharge apparatus.

25. Apparatus according to claim 21, wherein the delivery means includes a manual trigger for initiating a light pulse when the delivery head is positioned to the operators satisfaction.

26. Apparatus according to claim 21, wherein the apparatus includes a safety interlock requiring at least two input devices to be actuated before light energy can be delivered from the delivery means.

27. Apparatus according to claim 26 including a delivery head from which the light energy is delivered, the delivery head including at least two input devices comprising the safety interlock, both input devices requiring actuation in order to enable light energy to be delivered from the delivery means.

28. Apparatus according to claim 26, wherein the input devices comprise electrical input devices (such as switch means).

29. Apparatus according to claim 26, wherein following actuation the input devices comprising the interlock are reset to a non-actuation state.

30. Apparatus according to claim 21, wherein a controller is provided for

selectively adjusting the intensity of the light delivered.

31. Apparatus according to claim 21, wherein the apparatus includes different preset settings which may be switched to alter one or more parameters of the light energy delivered, dependent upon the tint of the glazing panel to be de-bonded or other factors.

32. Apparatus according to claim 31, wherein adjustable light energy parameters include:

light intensity; and/or,

pulse duration; and/or

pulse interval.

33. Apparatus according to claim 21, wherein the light energy delivery means comprises electrical gas discharge device.

34. Apparatus according to claim 33, wherein the electrical discharge device includes a light emitting discharge tube.

35. Apparatus according to claim 34, wherein the electrical gas discharge apparatus includes a pair of light emitting discharge tubes arranged in side by side relationship.

36. Apparatus according to claim 21, further comprising cooling means for cooling a light emitting element of the light energy delivery means.

37. Apparatus according to claim 36, wherein the cooling means comprises air cooling means including an electrically operated fan.

38. Apparatus according to claim 33, including a pulse forming network having a capacitor and inductor arrangement in which the capacitor discharges through the inductor to drive the electrical gas discharge apparatus to produce a light pulse.

39. Apparatus according to claim 38, including a trigger network for initiating the capacitor of the pulse forming network to discharge.

40. Apparatus according to claim 21, wherein the apparatus includes a reflector arranged to direct emitted light in a predetermined direction.

41. Apparatus according to claim 21, wherein the apparatus comprises a window through which emitted light is directed to pass through the glazing panel.

42. Apparatus according to claim 21, wherein the apparatus comprises an edge guide arranged to locate against a running edge of the glazing panel.

43. Apparatus according to claim 21, wherein the apparatus comprises:

i) a light energy delivery head including an electrically operable light emitting element;

ii) a base unit remote from the delivery head, the base unit including electrical power supply for the light emitting element of the delivery head; and,

iii) a flexible umbilical extending between the base unit and the delivery head permitting connection of the delivery head to the base unit.

44. Apparatus according to claim 43, wherein the light emitting element of the delivery head comprises an electrical gas discharge light emitting device, the base unit including an electrical power arrangement having a capacitor for discharging through the electrical gas discharge light emitting device in the head via the umbilical.

45. A method of releasing a glazing panel from a frame to which the glazing panel is bonded by interposed bonding material, the method comprising the steps of:

directing at least one light output pulse from a flashlamp via an optical delivery head at a wavelength to be absorbed by either one of the bonding material or a frit layer on an inside face of the glazing panel about a periphery thereof and conforming to the frame;

moving the optical delivery head to adjacent portions of the glazing panel along a path of either one of the frit layer or the bonding material; and

repeating the at least one light pulse to effect release of the glazing panel from the frame.

46. A glazing panel releaser for releasing a glazing panel from a frame to which the glazing panel is bonded by interposed bonding material, said glazing panel releaser

be released.

PTO-103X
(Rev. 8-95)

FILING RECEIPT

UNITED STATES DEPARTMENT OF COMMERCE
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ASSISTANT SECRETARY AND COMMISSIONER
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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTORNEY DOCKET NO.	DRWGS	TOT CL	IND CL
08/693,060	08/13/96	1301	$880.00	2170-00005	1	20	2

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Applicant(s)

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CONTINUING DATA AS CLAIMED BY APPLICANT-
THIS APPLN IS A 371 OF PCT/GB95/02847 12/06/95

FOREIGN/PCT APPLICATIONS-UNITED KINGDOM 9424659.2 12/07/94

TITLE
RELEASING OF BONDED SCREENS

PRELIMINARY CLASS: 156

(se reverse)

PTO-103X
(Rev. 8-95)

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UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTORNEY DOCKET NO.	DRWGS	TOT CL	IND CL
09/133,854	08/14/98	1734	$790.00	2170.00010	1	17	3

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CONTINUING DATA AS CLAIMED BY APPLICANT-
THIS APPLN IS A CON OF 08/693,060 08/13/96

FOREIGN APPLICATIONS-	UNITED KINGDOM	9424659.2	12/07/94
	UNITED KINGDOM	PCT/GB95/02847	12/06/95

TITLE
RELEASING OF BONDED SCREENS

PRELIMINARY CLASS: 156

(see reverse)

PTO-103X
(Rev. 8-95)

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UNITED STATES ARTMENT OF COMMERCE
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Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTORNEY DOCKET NO.	DRWGS	TOT CL	IND CL
09/184,186	11/02/98	3726	$2,686.00	2170.00013	5	45	2

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FOREIGN APPLICATIONS- UNITED KINGDOM 9817441.0 08/11/98

TITLE
RELEASING OF GLAZING PANELS

PRELIMINARY CLASS: 029

DATA ENTRY BY: DURHAM, DESHAWN TEAM: 05 DATE: 02/23/99

(s e reverse)

CERTIFICATE OF MAIL[illegible] BY "EXPRESS MAIL" (37 CFR [illegible] Applicant(s): Robert Marc Clement et al.			Docket No. 2170.00013
Serial No. 09/184,186	Filing Date November 2, 1998	Examiner	Group Art Unit 3726

Invention: **RELEASING OF GLAZING PANELS**

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AMENDMENT TRANSMITTAL LETTER (Large Entity) Applicant(s): Robert Marc Clement et al.			Docket No. 2170.00013
Serial No. 09/184,186	Filing Date November 2, 1998	Examiner	Group Art Unit 3726

Invention: **RELEASING OF GLAZING PANELS**

TO THE ASSISTANT COMMISSIONER FOR PATENTS:

Transmitted herewith is an amendment in the above-identified application.

The fee has been calculated and is transmitted as shown below.

CLAIMS AS AMENDED

	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST # PREV. PAID FOR		NUMBER EXTRA CLAIMS PRESENT		RATE	ADDITIONAL FEE
TOTAL CLAIMS	47	-	45	=	2	x	$18.00	$36.00
INDEP. CLAIMS	4	-	3	=	1	x	$78.00	$78.00
Multiple Dependent Claims (check if applicable) ☐								$0.00
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT								$114.00

☐ No additional fee is required for amendment.

☐ Please charge Deposit Account No. in the amount of
A duplicate copy of this sheet is enclosed.

☒ A check in the amount of **$114.00** to cover the filing fee is enclosed.

☒ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. **02-2712**
A duplicate copy of this sheet is enclosed.

- ☒ Any additional filing fees required under 37 C.F.R. 1.16.
- ☒ Any patent application processing fees under 37 CFR 1.17.

Signature

Dated: **April 20, 200**

Daniel H. Bliss (Reg. No. 32,398)
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I certify that this document and fee is being deposited on with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Assistant Commissioner for Patents, Washington, D.C 20231.

Signature of Person Mailing Correspondence

Typed or Printed Name of Person Mailing Correspondence

cc:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit: 3726	
Examiner:	**PRELIMINARY AMENDMENT**
Applicant: Robert Marc Clement et al.	
Serial No.: 09/184,186	
Filing Date: November 2, 1998	
For: RELEASING OF GLAZING PANELS	

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

On page 1, before line 1, insert -- The present application is a Continuation-In-Part of United States patent application Serial No. 09/133,854, filed August 14, 1998, which is a continuation of United States patent application Serial No. 08/693,060, filed August 13, 1996. --.

IN THE CLAIMS:

Please add new claims 46 and 47 as follows:

46. (NEW) A method of releasing a windscreen panel from a frame to which the windscreen panel is bonded by interposed bonding material, the method comprising the steps of:

directing light output from a laser source at a frit layer on an inside face of the windscreen panel about a periphery thereof and conforming to the frame;

providing the light output at a wavelength absorbed by the frit layer; and

moving the light output along a path of the frit layer at a predetermined rate to carbonize the frit layer to effect release of the windscreen panel from the frame.

47. (NEW) A method of releasing a windscreen panel from a frame to which the windscreen panel is bonded by interposed bonding material, the method comprising the steps of:

directing light output from an array of laser diodes at a frit layer on an inside face of the windscreen panel about a periphery thereof and conforming to the frame;

providing the light output at a wavelength absorbed by the frit layer; and

moving the light output along a path of the frit layer at a predetermined rate to carbonize the frit layer to effect release of the windscreen panel from the frame.

REMARKS

New claims 46 and 47 have been added. Claims 1 through 47 remain in the application.

Attached to this Preliminary Amendment is a new Declaration and Power of Attorney claiming the benefit of 35 U.S.C. § 120 of prior U.S. patent application Serial No. 09/133,854 and 08/693,060. Applicants have amended the Specification to contain a specific reference to Serial No. 09/133,854, which is still pending and Serial No. 08/693,060. Applicants have added new claims 46 and 47 to claim additional subject matter to which Applicants are entitled. Applicants look forward to early consideration of the pending claims.

Respectfully submitted,

By: _____

Daniel H. Bliss
Reg. No. 32,398

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Date: April 20, 2000

Docket: 2170.00013

Docket No.
2170.00013

Declaration and Power of Attorney For Patent Application

English Language Declaration

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled
RELEASING OF GLAZING PANELS

the specification of which

(check one)

☐ is attached hereto.

☒ was filed on November 2, 1998 as United States Application No. or PCT International Application Number 09/184,186

and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)			Priority Not Claimed
9817441.0 (Number)	United Kingdom (Country)	11/August/1998 (Day/Month/Year Filed)	☐
9424659.2 (Number)	United Kingdom (Country)	7/December/1994 (Day/Month/Year Filed)	☐
GB95/02847 (Number)	PCT (Country)	6/December 1995 (Day/Month/Year Filed)	☐

I hereby claim the benefit under 35 U.S.C. Section 119(c) of any United States provisional application(s) listed below:

(Application Serial No.)	(Filing Date)

I hereby claim the benefit under 35 U. S. C. Section 120 of any United States application(s), or Section 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. Section 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, C. F. R., Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
09/133,854	August 14, 1998	Pending
08/693,068	August 13, 1996	Abandoned

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. *(list name and registration number)*

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Sixth inventor's signature
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CORRECTED FILING RECEIPT

OC000000005190408

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: ASSISTANT SECRETARY AND COMMISSIONER OF PATENT AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/346,375	07/01/1999	1725	1322	2170.00019	6	44	2

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Date Mailed: 06/21/2000

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

Applicant(s)

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C ntinuing Data as Claimed by Applicant

THIS APPLICATION IS A CIP OF 09/184,186 11/02/1998

Foreign Applications

UNITED KINGDOM 9817441.0 08/11/1998

If Required, Foreign Filing License Granted 07/28/1999

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JUN 23 2000
BLISS McGLYNN P.C.

Title

RELEASING OF GLAZING PANELS

Preliminary Class

219

Data entry by : SMALLWOOD, EAON **Team :** OIPE **Date:** 06/21/2000